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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,677

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EXAMINER

GEORGEWILL, OPIRIBO

ART UNIT

PAPER NUMBER

4153

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,677	Applicant(s) SQUEDIN ET AL.	
	Examiner OPIRIBO GEORGEWILL	Art Unit 4153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/01/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d) or (f), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: The disclosure is missing applicable sub-titles. Applicant is required to use the applicable subtitles below to identify the relevant sections in the disclosure.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

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- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim 1 recites "the response(s), but there is antecedent reference of "a response(s)". Claim 1 should recite "a response(s)" and the examiner will construe the claim as reading thus. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (***See MPEP Ch. 2141***)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;

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- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

5. Claims 1, 2, 3, 4, 5, 6, 7, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weerahandi et al., US Pub No. 20020133614 A1 in view of Charles et al., US Pub No. 20050130681.

Re claim 1, Weerahandi discloses a communication terminal (figure 1, reference 30, 60; paragraph [26]) including communication means providing a connection to one or more application servers (AS) (figure 1, reference 50; paragraph [26]) through a communication network (figure 1, reference 10; paragraph [26]), which terminal is characterized in that it includes a measurement means (paragraph [27], Weerahandi discloses the taking of various delay measurements) adapted to sent at least one message to at least one application server (paragraph [27], Internet Control Management Protocol (ICMP) Echo Request Packet is sent to node) and to determine at least one quality of service measurement as a function of the response(s) to said at least one message (paragraph [27], round trip delay).

Weerahandi discloses different mediums that could be used in the network (paragraph [26]). Weerahandi is silent about using a radio network. However, Charles in related art (see abstract, fig 1), discloses a radio network terminal (fig 1, ref 18; paragraph [24]) communicating with an application server (fig 1, ref 24 and 26; paragraph [23]). It would have been obvious to a person having ordinary skills in the art, at the time of the invention, to incorporate the teaching of Charles

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into the disclosure of Weerahandi, as a whole, so as to have a radio communication terminal connected to one or more application servers through a communication network so as to add mobility.

The rejection of claim 1 is incorporated herein. Claims 2, 3, 4, 5, 6, 7, 11 depend on claim 1 and only the further limitations are discussed below.

Re claim **2**, the combine teaching of Weerahandi in view of Charles, as a whole, discloses a means for displaying said response(s) on a display screen (paragraph [67], where Weerahandi discloses a display (CTR monitor)).

Re claim **3**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the characterizing in that the response displayed (paragraph [67], where Weerahandi discloses a display means on a display screen (CRT monitor), it would be obvious to a person having ordinary skills to display the response on a display) indicates for each server at least the time elapsed between sending a message and receiving a response to said message (paragraph [67], where Weerahandi discloses that transmission and reception of Echo request and Echo reply is timed and the difference gives us the round trip delay) and the number of users logged onto said server (paragraph [34], where Charles discloses that congestion criterion is used. It is known one of the factors of congestion is the number of user. It would therefore be obvious to a person having ordinary skills in the art at the time that the invention was made to use the number of users logged onto the server as a response displayed on the screen).

Re claim **4**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the including automatic selection means for determining a set of application servers providing a giving application (paragraph [31], where Charles discloses the server that is best suited for providing the service (application) is chosen), for obtaining from said measurement means relating to each of the application server of said set (paragraph [27], where Weerahandi discloses receiving round trip delay measure from multiple nodes (application servers)), and for automatically choosing an application server from said set as a function of those measurement (paragraph [31], Charles discloses selecting the server that is closest to the mobile terminal so as to improve quality of service. Charles teaches that the selection criterion of proximity to the mobile is to improve quality of service. Charles further teaches the using congestion criterion instead of proximity to mobile as the selection criterion. It would also be obvious to a person having ordinary skills in the art, given the disclose of Weerahandi, in view of the teaching of Charles, as a whole, to use round trip delay disclosed by Weerahandi as a selection criterion)

Re claim **5**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the measurement means determine a quality of service measurement as a function of the time elapsed between sending a message and receiving a response to said message (paragraph [27], where Weerahandi disclose determination of the bandwidth (quality of service) as a function of round trip time delay (time elapse)).

Re claim **6**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the measurement means determine a quality of service measurement as a function of the time elapsed between sending a message and receiving a response to said message (paragraph [27], where Weerahandi disclose determination of the bandwidth (quality of service) as a function of round trip time delay (time elapse)), and the number of users logged into said server (paragraph [34], Charles discloses congestion criterion).

Re claim **7**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the measurement means sending a burst of messages (paragraph [28], Weerahandi discloses sending sets of data packets to each node (burst of messages), generating a set of data consisting of data sizes and corresponding delay) and determining a quality of service measurement by averaging the time elapse between sending the message of said burst and the response to the corresponding message (abstract, Weerahandi discloses that a mean delay is estimated between nodes).

The rejection of claim 4 is incorporated herein. Claim 9 depend on claim 4 and only further limitations will be addressed below.

Re claim **9**, the combined teaching of Weerahandi in view of Charles, as a whole, discloses the including control means adapted to launch said measurement means periodically when said terminal is connected to said given application hosted by first application server and wherein said control means are adapted to determine if a new application server hosting given said application

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produces a quality of service and if appropriate to connect automatically to said new application server (paragraph [31] where Charles discloses that selection of the server while a call (application) is in process so as to improve quality of service).

Re claim **11**, Weerahandi in view of Charles, as a whole, discloses that the message is an IP packet (paragraph [27], where Weerahandi discloses that the packet is an Internet control management protocol (ICMP) echo request packet).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weerahandi et al., US Pub No. 20020133614 A1 in view of Charles et al., US Pub No. 20050130681 as applied in claim 1 above and further in view of Kimchi et al., US Pub No. 20020120760.

The limitation of claim 1 is incorporated herein. Claim 8 depends on claim 1 and only further limitations are addressed herein.

Re claim **8**, Weerahandi in view of Charles, as a whole, disclose getting a set of data of delay. Weerahandi in view of Charles further disclose a quality of service measure, but is silent on using the set of delay data to determine a jitter value. Kimchi in related art (see abstract), discloses that jitters is a quality of service value that can be requested (see paragraph [112], where Kimchi discloses jitter value). It would be obvious to a person having ordinary skills in the art to incorporate the teaching of Kimchi into the disclosure of Weerahandi in

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view of Charles, to use the data of delay and calculate a jitter value so as to have a more robust quality of service.

- 7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weerahandi et al., US Pub No. 20020133614 A1 in view of Charles et al., US Pub No. 20050130681 as applied in claim 1 above and further in view of Engler et al., US Pub No. 20050254652 A1.**

The rejection of claim 1 is incorporated herein. Claims 10 and 12 depend on claim 1 and only further limitations are addressed below.

Re claim **10**, Weerahandi in view of Charles, as a whole, discloses a measurement means but is silent about the measurement means being an application downloaded from an application server. Engler in related art (see abstract, fig 1) discloses an application delivered (downloaded) to the user device which measures the bandwidth consumed by the user (paragraph [33]). It would be obvious to a person having ordinary skills to incorporate the teaching of Engler into the disclosure of Weerahandi in view of Charles, as a whole, to have the application downloaded from an application server in the system discloses in Weerahandi in view of Charles, so as to measure quality of service parameters in a wireless network.

- 8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weerahandi et al., US Pub No. 20020133614 A1 in view of Charles et al., US**

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Pub No. 20050130681 as applied in claim 1 above and further in view of Ramasubramani et al., US Pat No. 6314108 B1.

Re claim **12**, Weerahandi in view of Charles, as a whole, discloses that the message is an ICMP message. Weerahandi in view of Charles is silent on the message being adapted to be converted by a gateway into an IP packet. Ramasubramani in related art (see abstract) discloses a multi-network gateway that converts packets to IP packets regardless to the protocol used (fig 2, ref 214; col 5, lines 61 – col 6, line 8). It would be obvious to a person having ordinary skills in the art at the time the invention was made to incorporate the teachings of Ramasubramani into the disclosure of Weerahandi in view of Charles, as a whole, and have the message that is adapted to be converted by a gateway into an IP packet so as to efficiently couple various networks to the internet.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Opiribo Georgewill whose telephone number is (571) 270-7926. The examiner can normally be reached on Mon-Thurs from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from

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the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/OPIRIBO GEORGEWILL/
Examiner, Art Unit 4153

/Vu Le/
Supervisory Patent Examiner, Art Unit 4153